

Listing and Amendments to the Claims

This listing of claims will replace the claims that were published in the PCT Application and annexed in the International Preliminary Report on Patentability:

1. (Currently Amended) A device for wirelessly transmitting and receiving audio and video data, comprising:

a-means for receiving a transmission stream having data formatted into distinct packets that includes at least one ~~PID~~ packet identifier and an associated ~~PSI~~ program specific information, including a ~~PAT~~ program association table, a ~~PMT~~ program map table, a ~~CAT~~ conditional access table and a ~~NTT~~ network information table; and

a-means for demultiplexing the ~~PSI~~ program specific information based upon one or more ~~PID~~ packet identifier assignments to unique transport packets; and
means for eliminating transport stream packet headers;

a-means for reassembling the ~~PSI~~ program specific information in accordance with a ~~RTP~~ real time protocol data flow; and

a-means for encapsulating the ~~RTP~~ real time protocol data flow into one or more ~~IP~~ internet protocol packets with corresponding multicast addresses; and

a-means for communicating the reassembled transport stream.

2. (Currently Amended) The wireless device in claim 1, wherein the means for communicating comprises a ~~WLAN~~ wireless local area network.

3. (Currently Amended) The wireless device in claim 1, wherein the means for reassembling the ~~PSI~~ program specific information includes a means for inserting a multicasting ~~IP~~ internet protocol address for each associated ~~PMT~~ program map table.

4. (Currently Amended) The wireless device in claim 3, wherein the ~~PMT~~ program map table points to a program addressed by the multicasting ~~IP~~ internet protocol address.

5. (Currently Amended) The wireless device in claim 3, wherein the means for inserting a multicasting ~~IP~~ internet protocol address for each associated ~~PMT~~ program map table includes a means to calculate a ~~CRC~~ cyclical redundancy check.
6. (Currently Amended) The wireless device in claim 3, wherein the ~~PSI~~ program specific information contains a descriptor field in which the multicasting ~~IP~~ internet protocol address is stored.
7. (Currently Amended) The wireless device in claim 3, wherein the ~~PSI~~ program specific information is re-formed from the ~~PAT~~ program association table and the ~~PMT~~ program map table.
8. (Currently Amended) The wireless device in claim 1, wherein the ~~PSI~~ program specific information contains a flag to indicate that the ~~PSI~~ program specific information is unchanged from a prior transmission.
9. (Currently Amended) The wireless device in claim 1, wherein the program specific information contains a flag to indicate that the program specific information is changed from a prior transmission.
10. (Currently Amended) A mobile terminal adapted to wirelessly receive audio and video program data, comprising:
 - a means for receiving a transmission stream having data formatted into one or more distinct packets that include at least one multicasting ~~IP~~ internet protocol address and an associated ~~PSI~~ program specific information, including a ~~PAT~~ program association table and a ~~PMT~~ program map table;
 - a means for demultiplexing the ~~PSI~~ program specific information based upon one or more multicasting ~~IP~~ internet protocol address assignments to unique transport stream packets in accordance with a ~~RTP~~ real time protocol data flow;
 - a means for extracting a multicast address; and
 - a means for receiving a transmission stream associated with the multicast address.

11. (Original) The mobile terminal in claim 10, wherein the receiving means comprises means for receiving data according to the IEEE 802.11 standards.

12. (Currently Amended) A method for mapping MPEG-2 TS transport stream into an ~~IP~~ internet protocol-based ~~RTP/UDP/IP~~ real time protocol/user datagram protocol/internet protocol stack comprising the steps of:

receiving a transmission stream having data formatted into distinct packets that include at least one ~~PID~~ packet identifier and associated ~~PSI~~ program specific information, including a ~~PAT~~ program association table and a ~~PMT~~ program map table;

demultiplexing the ~~PSI~~ program specific information based upon one or more ~~PID~~ packet identifier assignments to unique transport packets;

eliminating transport stream packet headers;

reassembling the ~~PSI~~ program specific information in accordance with an ~~RTP~~ real time protocol data flow;

encapsulating the ~~RTP~~ real time protocol data flow into ~~IP~~ internet protocol packets with a multicast address; and

communicating reassembled transport stream over a ~~WLAN~~ wireless local area network.

13. (Currently Amended) A method for mapping MPEG-2 TS transport stream into an ~~IP~~-internet protocol-based ~~RTP/UDP/IP~~ real time protocol/user datagram protocol/internet protocol stack comprising the steps of:

receiving a transmission stream having data formatted into distinct packets that include at least one ~~PID~~ packet identifier and an associated ~~PSI~~ program specific information, including a ~~PAT~~ program association table and a ~~PMT~~ program map table; and

demultiplexing the ~~PSI~~ program specific information based upon one or more ~~PID~~-packet identifier assignments to unique transport packets in accordance with an ~~RTP~~ a-real time protocol data flow; and

extracting a multicast address; and

assembling a video program associated with the multicast address.

14. (Currently Amended) A method of decoding a digitally compressed video stream that has been packetized and transmitted over a packet-based network in a sequence of packets, the method comprising the steps of:

receiving packets associated with at least one multicasting ~~IP~~ internet protocol address and associated PSI program specific information, including a PAT program association table and a PMT program map table;

determining which transmitted packets associated with the PSI program specific information based upon a ~~PID~~ packet identifier assignment to unique transport stream packets in accordance with an ~~RTP~~ a real time protocol data flow; and

a means for extracting a multicast address; and

a means for receiving a transmission stream associated with the multicast address.

15. (Cancelled)

16. (Currently Amended) The computer readable medium for mapping in claim ~~15~~ 18, wherein the PSI program specific information further contains a flag to indicate that the PSI program specific information is unchanged from a prior transmission.

17. (Currently Amended) The computer readable medium for mapping in claim ~~15~~ 18, wherein the PSI program specific information further contains a flag to indicate that the PSI program specific information is changed from a prior transmission.

18. (New) The wireless device according to claim 1, further comprising a means for storing said audio and video data, wherein said audio and video data are stored on a computer readable medium in one or more data structures selected from the group comprising one distinct packet that includes at least one first field containing an internet protocol multicast address, a second field representing a program association table and an associated program map table, a third field containing data representing a real time protocol header and a fourth field containing data representing a program.

19. (New) The method according to claim 12, further comprising storing said audio and video data, wherein said audio and video data are stored on a computer readable

medium in one or more data structures selected from the group comprising one distinct packet that includes at least one first field containing an internet protocol multicast address, a second field representing a program association table and an associated program map table, a third field containing data representing an real time protocol header and a fourth field containing data representing a program.

20. (New) The method according to claim 13, further comprising storing said audio and video data, wherein said audio and video data are stored on a computer readable medium in one or more data structures selected from the group comprising one distinct packet that includes at least one first field containing an internet protocol multicast address, a second field representing a program association table and an associated program map table, a third field containing data representing an real time protocol header and a fourth field containing data representing a program.

21. (New) The method according to claim 14, further comprising for storing said audio and video data, wherein said audio and video data are stored on a computer readable medium in one or more data structures selected from the group comprising one distinct packet that includes at least one first field containing an internet protocol multicast address, a second field representing a program association table and an associated program map table, a third field containing data representing a real time protocol header and a fourth field containing data representing a program.

22. (New) A method for mapping a program data stream into transport packets, said method comprising:

- receiving said program data stream including at least one packet identifier and associated program specific information, including a program association table, a program map table, a conditional access table and a network information table;

- demultiplexing said program specific information based on at least one packet identifier assignment to unique transport data packets;

- eliminating transport stream packet headers;

- reassembling the associated program specific information in accordance with a real time protocol data flow;

encapsulating the real time protocol data flow into one or more internet protocol packets with corresponding multicast addresses; and
communicating the reassembled transport stream.

23. (New) A system for mapping a program data stream into transport packets comprising:

means for receiving said program data stream including at least one packet identifier and associated program specific information, including a program association table, a program map table, a conditional access table and a network information table;

means for demultiplexing said program specific information based on at least one packet identifier assignment to unique transport data packets;

means for eliminating transport stream packet headers;

means for reassembling the associated program specific information in accordance with a real time protocol data flow;

means for encapsulating the real time protocol data flow into one or more internet protocol packets with corresponding multicast addresses; and

means for communicating the reassembled transport stream.